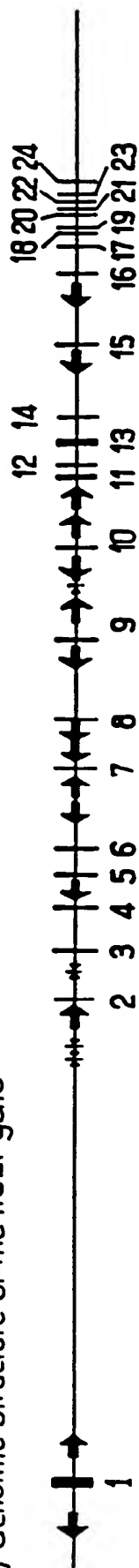


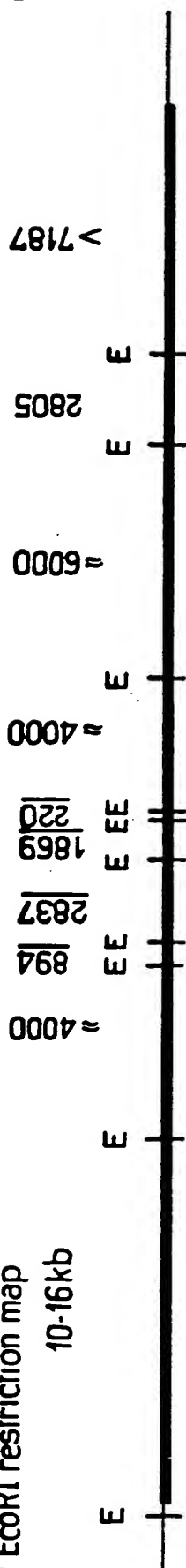
FIG. 1

A) Genomic structure of the nCL1 gene

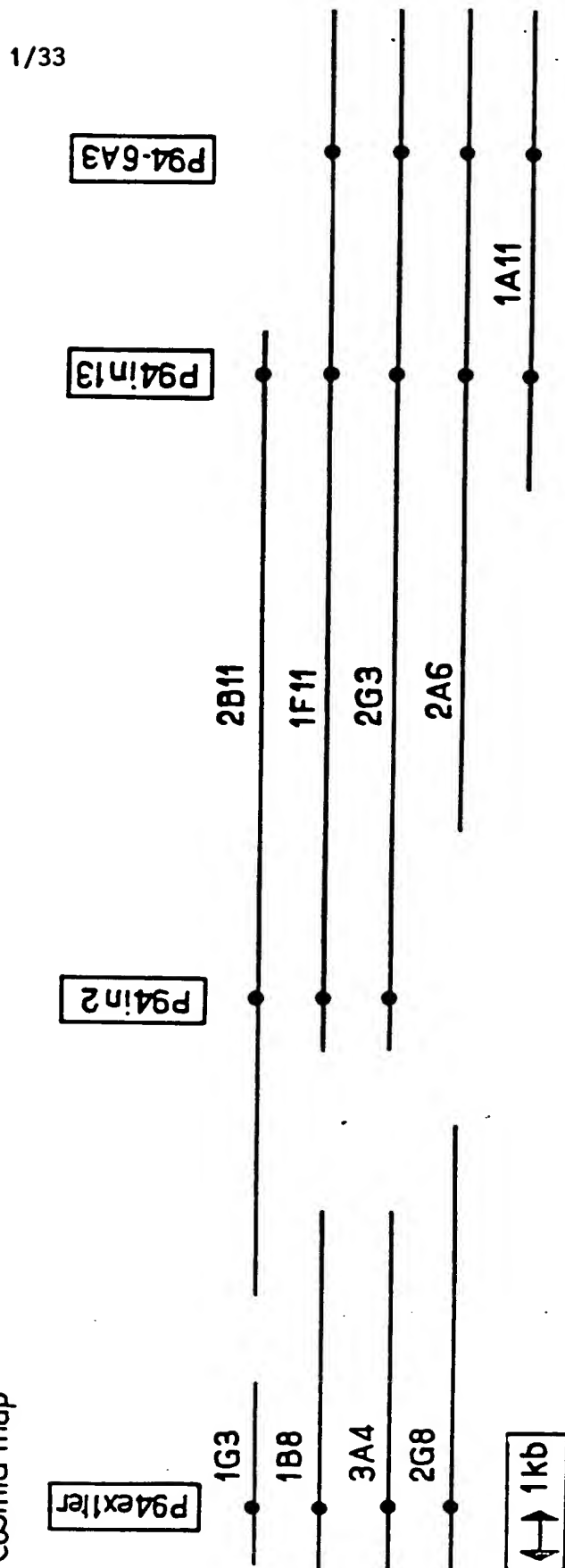


B) EcoRI restriction map

10-16kb



C) Cosmid map



SUBSTITUTE SHEET (RULE 26)

[illegible]

SUBSTITUTE SHEET (RULE 26)

1
ATCCGACCGTCATTAGCGCATCTGTGGCTCCAAAGGACAGCGGCTGAGCCCGGTCCCGAGGGCCAGTTCTCTCACCGGCCCAAGCCCACTGAGGCTGGGGTGGAAACCCAGT
M P T V I S A S V A P R T A A E P R S P G P V P H P A Q S K A T E A G G G N P S 30 50 70 90 110

130
GGCATCTATTCAGCCATCATCAGCCGCAATTTTCCTATTATCGGAGTGAAGAAGACATTCGAGCACTTCACAGAAATGTCTAGAAAGAAAGTCTTTATGTGGACCTGAGTTC
G I Y S A I I S R N F P I I G V K E K T F E Q L H K K C L E K K V L Y V D P E F 170 190 210 230

250
CCACCGATGAGACCTCTCTTTATAGCCAGAAAGTTCCCATCCAGTTCGTAAGAGAGCTCCGGAATTTGGCAGAAATCCCGAATTTATCATTTGATGGAGCCCAACAGAACTGAC
P P D E T S L F Y S Q K F P I O F V W K R P P E I C E N P R F I I D G A N R T D 270 290 310 330 350

370
ATCTGTCAAGGACGAGTACGGAGCTGCTGGTTCTCGCAGCCATTGCCTGCCTGACCTGAACGAGCAGCTCTTTCCGAGTCATACCCCATGATCAAGTTTCATCGAAACTACGCA
I C O G E L G D C W F L A A I A C L T L N Q H L L F R V I P H D O S F I E N Y A 390 410 430 450 470

490
GGCATCTCCACCTCCCACTCTCGCGCTATGGAGAGTGGTGGACGTGTATAGATGACTGCTGCGCAAGCTGACAACTCAATCAATGCTGTTTCCAGAGTCCAGCCGCAATGAGTTC
G I F H F Q F W R Y G E W V D V V I D D C L P T Y N N Q L V F T K S N H R N E F 510 530 550 570 590

610
TGGAGTCTCTGCTGGAGAGCGTTATGCTAXGTCTCATGTTCTCTAGAACTCTGAAGGTGGGAACACCAAGGCGCATGGAGCACTTCACAGAGGGGTGGCAGAGTTTTTTCAG
W S A L L E K A Y A K L H G S Y E A L K G G N T T E A H E D F T G G V A E F F E 630 650 670 690 710

730
ATCAGCGATGCTCTAGTACATGTACAAGATCATGAAGAAGCCATCGAGAGAGGCTCCCTCATGCGTCTGCTCATGATGGACCAATGACCTATGGAACCTCTCTCTCTGCT
I R D A P S D H Y K I H K K A I E R G S L H G C S I D D G T N H T Y G T S P S G 750 770 790 810 830

850
CTGAACATGGGGAGTTGATTGCACGATGGTAAGGAATATGGATACTCACTGCTCCAGACTCAAGCTCAGACCTCAGCCCAAGCGTCCAGTCAAGACCGACCGCAATCATTCCTGTT
L N H G E L I A R M V R N H D N S L L O D S D L D P R G S D E R P T R T I I P V 870 890 910 930 950

970
CAGTATGAGACAAAGTGGCTGCGGCTGCTGAGAGTCAAGCTCTGTACGGGCTGGATGAGTCCGTTCAAGGTGAGAAAGTGAAGTGAAGTGGTGGCTGGCGGAATCCGTTGG
Q Y E T R H A C G L V R G H A Y S V T G L D E V P F K G E K V K L V R L R N P W 1010 1030 1050 1070

1090
GCCAGGTGAGTGGAAAGGTTCTTGAGTGATATGGAAGGAGTGGAGTTTGTGCAAAAGATCAGAAAGCCCGTCTGCAGCAGCAGTCACTGAGGATGGAGAGTTCTGATGTC
G Q V E W N G S W S D R W K D W S F V D K D E K A R L Q H Q V T E D G E F W M S 1110 1130 1150 1170 1190

1210
TATCAGGATTTCTACCATTTTCAAAAGTTGGACATCTGCAACCTCAGCCGCGATGCTCTGCAAGTCTCAAAAGTTCAGACCTGGACAGTGTCTGTGAACGAGCGGCTGGGTACGG
Y E D F I Y H F T K L E I C N L T A D A L Q S D K L Q T W T V S V N E G R H V R 1230 1250 1270 1290 1310

[illegible]

FIG. 2C

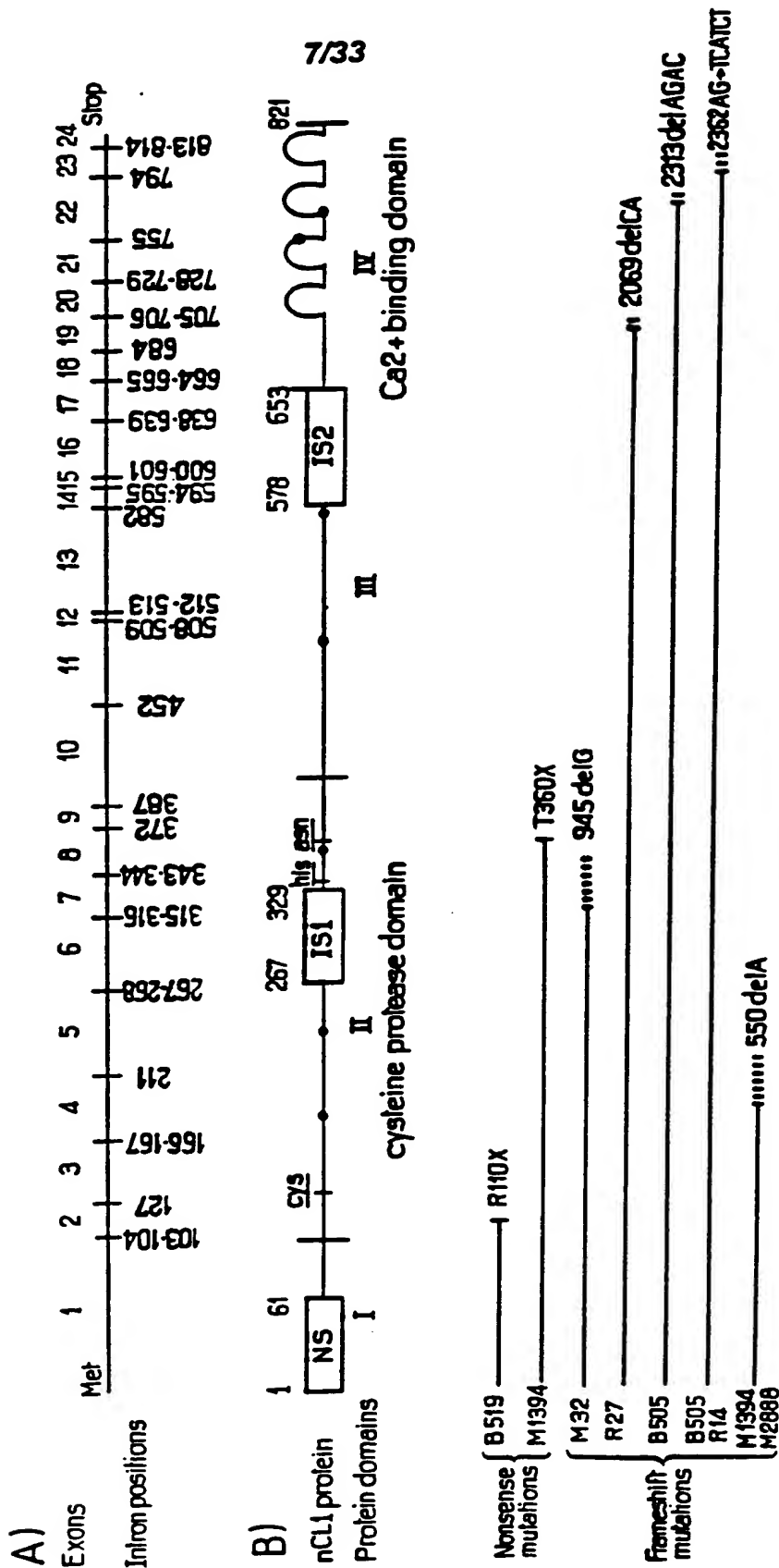
SUBSTITUTE SHEET (RULE 26)

[illegible]

Figure 3:

Human	1	MTVISASVAPRTAAEPRSPGVPHPAOSKATEAGGNPSGIYSALLSRNFPLIGVKEKTE ¹ CHKKCLEKKV ¹ YVDP ¹ EPF ¹ PD ¹ ETS ¹ FYSQKFP ¹ QFV ¹ KK ¹ RP	100
Rat	2PT.....G.....G.T.....H.G.....L.....	
Pig	3		
Cow	4		
	1	EICENPF ¹ IIDG ¹ NR ¹ DI ¹ CGE ¹ IG ¹ DC ¹ FF ¹ LA ¹ AIACLT ¹ LNQHL ¹ FR ¹ TH ¹ HD ¹ CSFIEN ¹ YAG ¹ IF ¹ HE ¹ Q ¹ FR ¹ YGE ¹ W ¹ V ¹ VI ¹ DD ¹ CLPT ¹ YNNQ ¹ VE ¹ TK ¹ SNHRN ¹ E ¹ WSALL ¹	200
	2G.....D.....L.....ER.....T.....D.....	
	1	KAYAK ¹ LG ¹ SE ¹ EA ¹ KG ¹ GN ¹ TE ¹ AW ¹ ED ¹ IGG ¹ VAE ¹ FFE ¹ IRDA ¹ SDMYKIMKKAIERGS ¹ MECSID ¹ DGTN ¹ TYGTSPSGINMGELIARVVRNMDNSLLQDSLDPRGS	300
	2T.....K.....R.....	
	3		
	4		
	1	DERE ¹ RT ¹ LI ¹ PVOY ¹ ETRMAC ¹ VRG ¹ HAYS ¹ IGLDE ¹ VPF ¹ KGEK ¹ V ¹ Y ¹ LR ¹ NPWR ¹ QVE ¹ NG ¹ SDRWK ¹ MSFVDKDEKARLQHQVTE ¹ DGE ¹ W ¹ SYE ¹ DE ¹ IYH ¹ FTKLE	400
	2	.D.S...V.....E.AL.....G.....D.V.....	
	3	.D...V...F.....E.AL.....S.....D.V.....	
	4	.D...M.V...F.....E.ALY.....S...Y.....D.....	
	1	IC ¹ NTADA ¹ QSDK ¹ LQ ¹ TW ¹ TSVNE ¹ GV ¹ RGCS ¹ AG ¹ GC ¹ NR ¹ FPD ¹ FT ¹ NT ¹ QYRLK ¹ LEE ¹ DD ¹ PD ¹ DD ¹ SEVI ¹ CSFLVA ¹ Q ¹ K ¹ NR ¹ RK ¹ DRKI ¹ CSLFTI ¹ CF ¹ AI ¹ VE ¹ V ¹ KKEMHG	500
	2E.....TG.....N.....R.....N.....	
	3		
	1	NKQ ¹ OKDFF ¹ YNASKARSKTYI ¹ NR ¹ EV ¹ SQR ¹ FR ¹ EP ¹ SE ¹ VIV ¹ EST ¹ YE ¹ PHQEGE ¹ IL ¹ VE ¹ SEK ¹ NLSEEVENTISVDRPVKKKTK ¹ PIFVSDRANSN ¹ KELGVD	600
	2R.....E.....M.....K.....R.....	
	3		
	1	QEESEEGKGTSPDKOKOSPOPOP ¹ SGSSDO ¹ SE ¹ EOO ¹ FRNIFKQIAGDDME ¹ ICADE ¹ KKV ¹ NTV ¹ VNKKH ¹ DKL ¹ TH ¹ GFTLESCRS ¹ MIAL ¹ MD ¹ TGSGKLN ¹ QEE ¹ HH ¹ DM	700
	2	..A...D.G...GE...R...HT	
	3QD.....EK...K.E.SNT.....	
	1	NKIKAWQK ¹ FKHY ¹ TDQ ¹ SG ¹ TINS ¹ YEM ¹ VND ¹ AGFHLNNQ ¹ LYDIIT ¹ MYADK ¹ HMNI ¹ DS ¹ IC ¹ CFVR ¹ EGE ¹ RA ¹ FA ¹ DKDGD ¹ GI ¹ KNVLEW ¹ Q ¹ LTMYA	800
	2	K.....H.....S.....	

FIG. 4



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FIG. 5

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FIG. 6

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FIG. 7A) EXON 2Normal
sequence

AATCCCCGATTTA



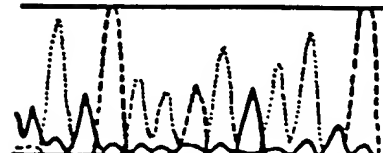
B519

CGA → TGA
Arg110 Stop

AATCCCT*GATTTA

B) EXON 8Normal
sequence

AGCTGGTGCGGCT



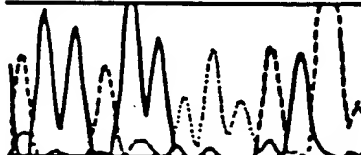
M2407

GTG → GGG
Val354 Gly

AGCTGGG*GCGGCT

C) EXON 13Normal
sequence

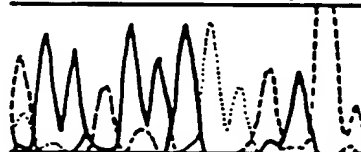
TCCTCCGGGTCTT



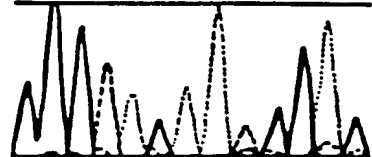
R 12

CGG → CAG
Arg572 Gln

TCCTCC*AGGTCTT

D) EXON 22Normal
sequence

CCATGCGGTACGC



Amish

CGG → CAG
Arg769 Gln

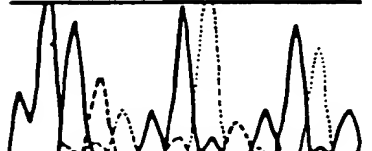
CCATGC*AGTACGC



B501

CGG → CAG
Arg769 Gln

CCATGC*AGTACGC



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LISTE DE SEQUENCES

(1) INFORMATION GENERALE:

(i) DEPOSANT:

- (A) NOM: AFM
- (B) RUE: 13, place de Rungis
- (C) VILLE: PARIS
- (E) PAYS: FRANCE
- (F) CODE POSTAL: 75013
- (G) TELEPHONE: (1) 45 65 13 00

(ii) TITRE DE L' INVENTION: LGMD GENE

(iii) NOMBRE DE SEQUENCES: 4

(iv) FORME LISIBLE PAR ORDINATEUR:

- (A) TYPE DE SUPPORT: Floppy disk
- (B) ORDINATEUR: IBM PC compatible
- (C) SYSTEME D' EXPLOITATION: PC-DOS/MS-DOS
- (D) LOGICIEL: PatentIn Release #1.0, Version #1.25 (OEB)

(2) INFORMATION POUR LA SEQ ID NO: 1:

(i) CARACTERISTIQUES DE LA SEQUENCE:

- (A) LONGUEUR: 3018 paires de bases
- (B) TYPE: acide nucléique
- (C) NOMBRE DE BRINS: double
- (D) CONFIGURATION: linéaire

(ii) TYPE DE MOLECULE: ADN (génomique)

(xi) DESCRIPTION DE LA SEQUENCE: SEQ ID NO: 1:

TGATAGGTGC TTGTAACTG TGCTTAACGA AAACATACCG TGTGCTGTAG GGA	60
CTTGTTTATA TCAGTTAGCC TGGTTTCGCT AACAGTACAT CATTTTGCTT AAAGTCACAG	120
CTTACGAGAA CCTATCGATG ATGTTAAGTG AGGATTTTCT CTGCTCAGGT GCAC	180
TTTTTTTAA GACGGAGTCT CTTTCTGTCA CCTGGGCTGG AGTGCAGTGG CGTGATCTGG	240
GTTCAACAACA ACCTCTGCCT CCTGGGTTCA AGCAATTCTT CTGTCTCAGC CTCCCAAGTA	300
GCTGGGATTA CAGGCACCCG CCGCCACACC CGGCTTATTT TTGTATTTTT AGTAGAGACA	360
GGGTTTCACT ATTGTTGACC ATGCTGGTCT CGAACTCGTG ACCTCATGTG ATCCACCCGC	420
CTCGGCCTCC CAAAGTGCAG AGATTAGAGA CGTGAGCCAC ATGGCCCAGC AGGACCACTT	480

FIG 8A/1

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TTTAGCAGAT TCAGTCCCAG TGTTCAATTT GTGGATGGGG AGAGACAAGA GGTGCAAGGT 540
 CAAGTGTGCA GGTAGAGACA GGGATTTTCT CAAATGAGGA CTCTGCTGAG TAGCATTTC 600
 CATGCAGACA TTTCCAATGA GCGCTGACCC AAGAACATTC TAAAAAGATA CCAAATCTAA 660
 CATTGAATAA TGTTCTGATA TCCTAAAATT TTAGGACTAA AAATCATGTT CTCTAAAATT 720
 CACAGAATAT TTTTGTAGAA TTCAGTACCT CCCGTTACCC CTAAGTAGCT TTTTGTCAAT 780
 ATTGTTTTCC ATTCATTGA TGGGCAGTAG TTGGGTGGTC TGTATAACTG CCTACTCAAT 840
 AACATGTCAG CAGTTCTCAG CTTCTTTCCA GTGTTACCT TACTCAGATA CTCCCTTTTC 900
 ATTTCTGTC AACACCAGCA CTTCATGTCA ACAGAAATGT CCCTAGCCAG GTTCTCTCTC 960
 TACCATGCAG TCTCTCTTGC TCTCATACTC ACAGTGTTC TTCACATCTA TTTTATGTTT 1020
 TCCTGGCTCA AGCATCTTCA GGCCACTGAA ACACAACCCT CACTCTCTTT CTCTCTCCCT 1080
 CTGGCATGCA TGCTGCTGGT AGGAGACCCC CAAGTCAACA TTGCTTCAGA AATCCTTTAG 1140
 CACTCATTTC TCAGGAGAAC TTATGGCTTC AGAATCACAG CTCGGTTTTT AAGATGGACA 1200
 TAACCTGTCC GACCTTCTGA TGGGCTTTCA ACTTTGAACT GGATGTGGAC ACTTTTCTCT 1260
 CAGATGACAG AATTACTCCA ACTTCCCCTT TGCAGTTGCT TCCTTTCCTT GAAGGTAGCT 1320
 GTATCTTATT TCTTTAAAA AGCTTTTTCT TCCAAAGCCA CTGCCATGC CGACCGTCAT 1380
 TAGCGCATCT GTGGCTCCAA GGACAGCGGC TGAGCCCCGG TCCCAGGGC CAGTTCCTCA 1440
 CCCGGCCCAG AGCAAGGCCA CTGAGGCTGG GGGTGAAAC CCAAGTGGCA TCTATTCAGC 1500
 CATCATCAGC CGCAATTTTC CTATTATCGG AGTGAAAGAG AAGACATTCC AGCAACTTCA 1560
 CAAGAAATGT CTAGAAAAGA AAGTTCTTTA TGTGGACCCT GAGTTCCAC CGGATGAGAC 1620
 CTCTCTCTTT TATAGCCAGA AGTTCCCCAT CCAGTTCGTC TGCAAGAGAC TCCGGTGAGT 1680
 AGCTTCCTGC TTGCTGGCTG GGTTCCCCC CCACGGAGGA GTCCTCTCAC TCAGCACCTC 1740
 CGGCAGCTCA GCTGTGCACA TGGGCACTGG GGAAGGATC CTGGCAGCAG CTCTGCTGGG 1800
 CTCTGTCTTT AAGTGTGAAG CAGGGAGGAG AGGAACAGGT CTCAGATATT TCACCAAATC 1860
 TCAGCAAAT CCAGAGGGAG AGCGCAGGAG GTGGGTGAT TCTTATGCTC TGGCTCTTC 1920
 TCTCTGAAAA AAAAAAAAAA ATCTTGCTTT TTATAAAGT GGGTGAACT CAGTTTAATT 1980
 CATCCTGTAA AAATAAATAT TCCTTTCTCA GAACAAATTC CAGACAGCCC AGATGTACCT 2040
 GTTCGTTTTA ATATTATTCA TCTTGGTAAG ATTATTTTCA TTTCTCTGGC TAAAATCATG 2100

FIG 8A/2

SUBSTITUTE SHEET (RULE 26)

45240-4249888

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ATGTTATTCT TCTTTAATTT ACCAATGGCC ATTCTTTCTG AAACACAGAA ACCCTAGAAA 2160
GAGAAGAGTC ATAGGCAAGG AATTTTTTTC ATGCATAAAA TGTGCGGTT AAAGAGAGAG 2220
AGACCTAGCA ATCGCTTTGG TCCACCTACC TCACCTCATA AGTGAGGAGT CAAGGCACAC 2280
TAGAGTGAAA TATATCTAGT GGGCACATGA CAGAGCCCGG ATTAAAACTT TGTTTTAGGA 2340
AACTCTCCCA GCCTCTGGGT TTCATTTACA GTGATCGCCA GGAGGGAAAT CACATTCCCC 2400
TGGCTCACCT CTCTGATCAT CCCTCCAGTG TGA CTCTTGT TCTTAATTCT AGAAATATTT 2460
ATTGAGCATC TACTAGTGCC AGCACTGGGC AAGCAACTGG GGGGACAGCA GTGAGTAAGA 2520
AAGACCAAAA TTCCAGCTGT CTTGGAACCT AGGCTCCTGA AGGGAAGATG GGCATTGAAC 2580
AAGAGTGACA TTGTCAGGAG ACGATGTTCT GGGTGCCACA GGATCATGTG GCAAGGAGAG 2640
CTAACCTGGT CCAGGGAGAC AAACCCTCTC TGAGGAAATG ATGACAAGCT GAGACCCAAT 2700
ACTATTGATT AGCCATGGTT TTCTTTAACC TAAGGTGGGC CAGGCATGGT GGCTCATGCC 2760
TATAAACCCA GCATTTTGA AGGCCAGGC TGGAGGATTG CTTGAGCCCA AGAGTTAGAG 2820
ACCAGCCTGG GCAACAGGGT GAAAACCTAT CTCTTTTGTA CTAAAAATTC AAAAAATTAT 2880
CCAGGCATGG TGGCACATGC CTGTGGTCCT AGCTACTCAG AGGCTGAGGT GGGAAGATCA 2940
CTTGAACCTG GGGAGTTTGA GGCAGCAGTG AGCCGAGATC ATGCCACTGC ACTCCAGGCT 3000
GGGTGACAGG AGTGAGAC 3018

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(2) INFORMATION POUR LA SEQ ID NO: 2:

(i) CARACTERISTIQUES DE LA SEQUENCE:

- (A) LONGUEUR: 11451 paires de bases
- (B) TYPE: acide nucléique
- (C) NOMBRE DE BRINS: double
- (D) CONFIGURATION: linéaire

(ii) TYPE DE MOLECULE: ADN (génomique)

(xi) DESCRIPTION DE LA SEQUENCE: SEQ ID NO: 2:

GATCCACCCG CCTTGGCCTC CCAAAGTGCT GAGATTACAG GTGTGAGCCA CCACGCCACG 60
CCGACACTGC CCTAACTCTC AAGTTGCATC CTTACTCGAA TAGTATGACA GTGTGGGAAG 120
CAGCATGGGA CAATGTAAAA AGGAGGCATG TTTCTGGCTT CTGCTACTTA CTAGCTGTGT 180
GTCTTTGCAC GAGTTTCTTA ACCTCTCTGG GCCTCAGTTT CTTATCTGA AAAATAACAA 240
TGATAGTATT CCCTTCACAG GGCCAAATGG AATACTATCA GGAACACTAC ATAATGGAAC 300
TCAATAAATA ATAGCTACTG CGGCCGGGCG CGGTGGCTCA CATCTGTAAT CCCAGCACTT 360
TGGGAGGCCG AGGCGGGTGG ATCACAAGGT CAAGAGATGG AGACCATCCT GGCCAACATG 420
GTGAAACCGT ATCTCTACTA AAGATACAAA AATTAGCTGG GCATGGTGGC GCATGCCTAT 480
AGTCCCAGCT ACTCGAGAGG CTGAGGCAGG AGAATCACTT GAACCCCGGA GGCAGAGGTT 540
TCAGTGAGCC AAGATTGCAC CAGTGCCTG CAGCCTGGCG ACAGAGTGAG ACTCCGTCTC 600
AAAAAAATAC CTATCTATCT ATCTGTCTAT CTACTGTTAT TCTTACCTGG TCATTTTCCTT 660
TTTGTTTCAC AGGAAATTG CGAGAATCCC CGATTTATCA TTGATGGAGC CAACAGAACT 720
GACATCTGTC AAGGAGAGCT AGGTAGGAAA GTGCCTCAGG TCAGATCCTG CCAGATGATC 780
AAGGGTGAT TACAAGGTGT GATCCCCTTC CAGGAGGTAA AGGGACAATC TGTGCTTGCT 840
TCCAGTAACT TTTTGGAAGA TTTTITATAA CAGTTGCTTT ATGGTCGTTT ATCTACATGC 900
TGGCGATTGC TTCATTTCTT CCTACATGCC TCTTTAGCAC TCTGCCATGC ATCACAGGGG 960
GSTATCTGCAT CCTGTGGCCT CCTCTCCAGT ATCTCAAGGA CACTTACATA CCCCCTCAG 1020
CATGACAAAA GCCCTGCTTT TCACTGTATC GTCTTTCTTG GAAGACAGCT CTGTGACTGT 1080
GCACCAAGCA TGCCCCTTGG GCATGGAGAT TCTAGATACA CACACAAAAG GCATCGCCAA 1140
GGAAAGCACT TGTAAGTGA ACCCTTGGTT TAAATTGGCC CAGCATAGCT CCATCTTTAA 1200

FIG. 8/B1

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142220-443555

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AAGAGTCTTT CCACAAAGAT GGCATCCGCC ATGTGGATGA GCATCCAATT TTCTCTTTGA 1260
TTGGTTAGCT TGA CTGCTCC ATCTGATCTT CCTCTCTCTC GACCTCTTGT TCAGAAAGTA 1320
TTGTCTTTGG TGTGGACTAT AAGCAAGCTC TGTGAAGTAA AATTGGAGAG AACACCAACA 1380
GAAACAATTT AAATTTGAGG AAAAGGGGGC ACCTAAGACC AAAGGAATTT GGCTTATTTT 1440
ATTCCAGAAG GGGAGGCTGA GAATAAATCA GATGAATATC TGGGTTCTTG CACCTGAGGG 1500
AAGGCTTCCT GCAGAGCCCT GGGCATAATA ATCTGGGACC TTCAAACCAA TAACCTCTTT 1560
TCCAAGGAAA GACTGGCTGC TTCCAAGGAG GGTAGGGGAG AGTCGGGCTG CAGGCAGCTC 1620
TCAAGTCTCC CTTGTCACAC TCTCAGGTTG GCATTTTCAC TTAAACCCAT CCTCCCTTAA 1680
GAAGGCAGTT CTTTGTGACC AGGGTACACC CCCTATTATA TATATATATA CACACACAGA 1740
GAGAGAGAGA GAGAGAGAGA GAGAGAAAGA GAGCAAAGTG TTACCTCCAA CTACATACAG 1800
TACTCTGTCA GAAAAGAGGT TCAGAGAATA AGAAAACGTC CCGAGCTCAT TCCGTTGCCA 1860
GCAATGTCTT ACTGCCCCCT ATAGACGGGT TCCAGGGCAG CTGCCTACCT GGCCTTCCTT 1920
CCAATACAAA TCATCTTGGT GGATGGTTCT CTGAGGCTCA GTCTTCGCTG AAGTCAGAAG 1980
AGGAATTGGA CTCACATTGC AAAGGCACAG GGCAGGGCAG ATTCCTTACA GGTGTTAGGA 2040
AGAACAACCC AGTTATGATC ACCTACTGCT CTGTCTCCAT TGAGGCCTAA AAAGGAAGTG 2100
AGTTTATACT GCAGTTGGAG GAACTGCCTG CAGCCTTGAG GAAAATGTCT AGTCACAAGG 2160
GAGTAAGTTA CCTGTTGATC ATATTGTCAA GGAATTCCTG TCCAATTCTC CTTCCCTGGG 2220
TTGACACCTC TGTAAGGTCA GATCTGGAAG TAGGAGAGTG GGCACCAAGG GAGTCCCCGT 2280
TCAGGGAAGT GGAGTGGCTG GCTGGGATTG GGGCTTTTTT TTCCCAGGAG GAGCAGGAGT 2340
GCTCAGGATC TGTGCCCTGT GTCTGCCTGC AGGGGACTGC TGGTTTCTCG CAGCCATTGC 2400
CTGCCTGACC CTGAACCAGC ACCTTCTTTT CCGAGTCATA CCCCATGATC AAAGTTTCAT 2460
CGAAAACTAC GCAGGGATCT TCCACTTCCA GGTGAGGTAA TGAGAGTGTA GTTAAGAGGG 2520
CCAGCGGCAG GCCACCCACC GCTGGTCTCC TGGCCTTGAC TTCCCAGAAG CTGGAGGAAA 2580
CTTCCCACCC ATCTACCCGC AGCGGCAACA GTCGGCATGG ACCCCCTTAA GGCTTCAAGC 2640
CTGGGAGGAA GCAGTTGCTT ATCTCTGGCT CCCTAATCCC TCCCCACCA CCTTCCACTA 2700
TGTCCCAGAA AGACAGGAAG ACATCCTGTT TACTGTGGGT CTATTTTGT CTTTGCAGCT 2760
GTCTGGCTGC TTTTATTGCC TGCAGCCCTT CTCAAGTAGG TCCCTAAGAT ATTAGCACTG 2820

FIG. 8B/2

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2880 TGACACCACA GGACCCTTCA GGTGTGACAG GAACCCCTGT CCAGGGCTCC TGTATACTTC
2940 TTCCTCTCTA AGGCATGGCG GTACCAAGGC TATCACTCCT CTCTTCCAAG CCCTGGAAGA
3000 AGAGTCTGCT TAACCTGGGG ATCAGGCTTC TTGTTTGCCC TAGAACTGAA TCTGATGGTT
3060 CTAGAATCCA TCCAGCTACT GGAAATTTTC TGGGTCCCAG TCACCTTGGC ATAGAGCTGG
3120 TGCTAGAGCA GAACCAAACCT GAATTCTACC TGTGAGGGTC TCGTAGCTTC CGGGATGCTG
3180 GGGAGTCAGC CTGTCTCCAG CTTCAAAGGC TCCCTCATGT CCCAGGATGA CCCACATTAT
3240 CAGTTCTTGC TCCCCGGGTC TTGCACCTCA GCACGGAAGG CCTCAGAAAA GGTCTGTCTC
3300 CAGGCTCAGA CTCCCCCTCC TGCCGCCTTG GGAACATGGC ATATTTAAAG GGTCTCAGAT
3360 CTAAAGGGCC TTACATACAA ATATCAGATA GATTTCTGTT CTCATTTCAG TGAGGGAGAA
3420 AGTGCCATTG AAAAGGAGAC TAAACCACAT TTGGCCCTTT TCAGTTCAAA CTGATTCATT
3480 CAAAAAGAG CGACATCCAA ACTTGAAATG ATTGAACAAT GTTCCTGCTA CAGCTAGAAT
3540 AGATTCTGGG TCACTTTGTT CCTCCGTTTC AATCCTTGTT CTTCAGTTTG GCATCAAGAA
3600 ATACCTAAAT CAGCACAGTG CCTTCACTGC ATAGTTCCCA ATCCTGGCCA CATTGAATCA
3660 GCTGGGGGCA CCTGAGAGTG CTGACACCCA GGCCCTGCCC CAGACCTGCT GAGCAGGAGA
3720 ATGAAAATCT TACATCCTAA GACACTCATG GAGCACCTAC TCTACCCATT ACTGGGCTGG
3780 ACTCTGTGGA AGACATGAAG TATATGTAAC TCACTTCCAG CTCTCAAAAA GCACCCAGTC
3840 CAGTTAGAGA CAGATTTACA CACCCCAAAC ACAAATAGG ATGAACAGGC ACCCAGATGC
3900 AGAGTCCAGG AAATGATGCT GCTTTGGGAT TCAAGAACCC CCTGAGGAAT GTGGAGGAAG
3960 GACACATTTTCTAACAGTAA TTTGAGTATG TGA CTCTGTG CGTGACGCTT CTGTGCAGTT
4020 CTGGCGCTAT GGAGAGTGGG TGGACGTGGT TATAGATGAC TGCCTGCCAA CGTACAACAA
4080 TCAACTGGTT TTCACCAAGT CCAACCACCG CAATGAGTTC TGGAGTGCTC TGCTGGAGAA
4140 GGCTTATGCT AAGTAAGCAA CACTTTAGAA TGTGAGGTGG GGCTAGAGGT GAGAAAGTGG
4200 GTTGCAAAAT CCAGCCGAGA CCTCACTCAC AGGAAGAGGC ATGTGCCTCT ATACGTGCAT
4260 ATGTGTGGGC ATGCAAGTCC AACTGTGACC CAAAGTTAGA GATCAGTTCC AGGCAACAAC
4320 AGCTCTAACT AAAAACATTA AATTTAAGAG TAGAAATGAA GATTTGCATA GAAGACCTTT
4380 AGCTTTAGCT CACCATAGCG AGTTCTTTCA TTGCACCTCC ATGGTGGCAT TGCAAGTCTT
4440 GGGATCAGAG CATTGTCCCA GGGTCTCGAT TGGCTCAACC TCATGTGCTT ATAGAAGATT

FIG. 8B/3

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TATAAAGACA TGTTGTCTCT CAACTTAAAA GCTCCACCCC AGATGATAAT AATGGATTTT 4500
CAAATTTTGG AACAAAGGTCA CTCTGTAATG CAGGCTGGAG TGCAGTGGTG CAGTCACGGA 4560
TCACTGTAGA TTGACCTCCT GGGTTCAAGG TGCTCCTCCC ACCTCAGCCT CCCAAGTAGC 4620
TGGGACTACA TCGGGGCATC ACCATGGCCC TTTTATTTTT GTATTTTTTT GTAGAGCGGG 4680
GTTTTCCCAT GTTGACCCAG ACTGTTCTCG AACTCTTGGG CTCATACAAT CCACCAGCCT 4740
TGCCCTCCCG AAGCGCTGGG ATTGCCGGTG TGAGCCACCA CACCGGCAGC TGCTAATGGC 4800
TTTAATGCAG CCCTTCCTCA ACGTTCAGGA TGTAGTGGA AGAGCTCTCA GGAAGTGGGG 4860
ATAGCTGGGT TTCAATCCCA GTGCTTCTGG CTCTCTGTGG TCTTGGGTGG GTCACCTAGC 4920
CTCTTGAGCT CAGTTTCTTC ATTATGAAGA AAGGGAATCA TTGTTTCCAT CCCATGAGCT 4980
CATAGGGTTA ATGTGGAATT GATGAAAGAA CATCACAGCA TCCAAGAGGT AAAGTTCTGG 5040
TGGCAGTGGT ACCTGGGTTT TGTTCCCTGG AACTCTGTGA CCCCAAATTG GTCTTCATCC 5100
TCTCTCTAAG GCTCCATGGT TCCTACGAAG CTCTGAAAGG TGGGAACACC ACAGAGGCCA 5160
TGGAGGACTT CACAGGAGGG GTGGCAGAGT TTTTGAGAT CAGGGATGCT CCTAGTGACA 5220
TGTACAAGAT CATGAAGAAA GCCATCGAGA GAGGCTCCCT CATGGGCTGC TCCATTGATC 5280
TAAGTCTGGG GTGTGGGGCA CAGGGTGGGG AGCTCCAAGT GTCAGGAAGC CTTTACCCA 5340
ATGAAGGGCA GCATAGAGCT TTTGTGTGGG ACAGAGCGAA TGTTTTGTTT GAGGAAGCAG 5400
GAACTGGCTC TCAACTTTGA GGAAGTGGGA TTTCTCAAGG GAGAACAGTT CTTCCGGATT 5460
TTCAATAAAG AACTGGTCA AGGACATTTT AAGCCCTGGA ATGTCAGTGG AAATCAGTCC 5520
AGAGGCCTGT GTCAGTGGAG GCCTCCCTTG CTGGTGCTCC TCAGTCTCAG CACGCTCCCA 5580
TTAAGCTGGC CACGTAATG GCTGTGGACC TGAGCCCACC ATTCCTTAA GAAAGCCTCC 5640
CAGTCACTGG GCTTTCACCA CACCTCCCCG CTTGAGACGT GGCCTTTGTG TTGTTACCTG 5700
GGAGAAGCTA AGCCTGCAGC ACCTTTCAGT GCAAAGAAAT GCTGTGAACT GAGACAGGAG 5760
CCAAGGGTAG GGAGATGGCC GCCCATGGCC AGGCCTCCTT CAGGGGGCAT GCCTTCCCTG 5820
AGGGCTGCTC AGTATATTGA TATGATAATC TTAGTGTTT CCATTGGGGA GGATGGGGCT 5880
GAAGCTGAAT TCCTGCCCCT TCTTCTCCCA ACACGCCCAA TGGACAGCTT GGAAGGTCAG 5940
TTAGCACACA ACACCATGGA TGAACTTTTT TTCTGTATCA CTTTTCTCCG TCTTCTCTCC 6000
ATTGCTGCTC TGTTGATCTC TCCTCTCTCC CTTTGTCTGT CCCATCTCTT TCTCCTCTCT 6060

FIG. 8B/4

SUBSTITUTE SHEET (RULE 26)

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CCTTCCCTTT CCACCCTTCT GTGTTTGTTT TCTCCCTCCC CTGTGTTGTT CCCTACATTG 6120
TCCATCGGGC CTCAGGATGG CACGAACATG ACCTATGGAA CCTCTCCTTC TGGTCTGAAC 6180
ATGGGGGAGT TGATTGCACG GATGGTAAGG AATATGGATA ACTCACTGCT CCAGGACTCA 6240
GACCTCGACC CCAGAGGCTC AGATGAAAGA CCGACCCGGG TGTGTACACC TCCGATTATC 6300
AGAACTGACC ATCCCTCCAA CCCACATGAC CCCGCCCTAT TAGTGTGAGA CTCCCCTCAG 6360
CAGCCAGGGC CTTACCCACA CACCCCCACC TGGCACCTCC CAAGGGTCTG GGTGAAATA 6420
ACTTGCTCAG CCAAGGCTCC TGAAGAGGGT GCAAGAACCA GGATTTTGA GGAATCTCT 6480
GCTGGAGTTT CTGCATATTG CATGGTCCAG GCAGTTCCTC TCATAACGAA CTATCAGACA 6540
GAAATACTTG TAAAGATACT TCATTTATTT TGAAATATTT TTCCTCTTCT AATGTATTCA 6600
TTTATTCATT CAACACTTAT TTTTGAGCTC CTACTATGTT CCAGGCACTC CTCTAGCAAA 6660
CAAAGCAAAT TCTCTCCTCT TTTTCAATAT TTGTGGAAA AGCAAGGTCT CCCTCTTGTA 6720
GAGTTTATAT TCTAGTATTT TCATAAGTTA TACCTGCTCA CTGGAGAATA CTGAGCCATA 6780
CAGAAAAACA CAGAGGAAAA TTTCACCTAT ATTTTCCCC ATGTAAAGAT AACCACCTT 6840
AACATCTAGT ATATGTTCTT CCAGGATTTT TCTATGCACA CACTGAATCT GTATTTTTAT 6900
TTTTAAAATG TTATCATATT GTATGTACCT CTTTGCAGCC TGCTTTTTTC AGTTAGTTTT 6960
TTTGTTTTTT TGGTTTTTTT TTTTTTTTGG AAACCAAGTC TTGCTCTATT CCCTAGGCTG 7020
GAGCACAGTT GTTGCCATCT CGGCTCACTG CAACCTCTGC CTCCAAAGTT AAACCTAATC 7080
TCCTGCCTCA GCCTCCCGAC ATAGCTGGGA TTACAGGCAC ACACCACCAC ACATGCCTAA 7140
TTTTTGATTT TTTTAGTAGA GACGGGGTTT CACCATGTTG GCTGGAATGG TCTTGAATC 7200
CTGACCTCAA GTGATCCACC TGCCTCAGCC TCCCAAAGTG CTGGGATTAC AAGTGTAAGC 7260
CACCACACCC GGCCTAGTTT GATATTCTTA ATGTGCCCAA AGTATTCTCC TGTAACATTT 7320
TTAATAGCT ACACAATATT CAAACACACA GATATGTTAT AATTATTIA CCAATACCC 7380
TATTATTGGA AAGTTGAGTT CTTTTTTTTT TTTGTTTTGT TTTGTTTTGC TACTATTCTA 7440
AAATGCTATA ACGAACATCC CAATAGATAC ATCTTTGTAT ACATCCATGG TGAATCCAT 7500
AGGACAGATT CCCAGCAGTA GAATTGCTGG GTTGAATGAT ATGCTTAGGG TAATGACAGA 7560
AGAGTCATTT CAAGCAGCTT CCTAGGGTCT TAGAACTTAA GGATTAATGA GTCTTCCCGC 7620
CCCCCTCCAG TCTATTCAGC ATGATCTGGA TCATGAGGAC TGAGATCTGG AAGAGACTGA 7680

FIG. 8B/5

SUBSTITUTE SHEET (RULE 26)

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GATCTGGGAG AGGCTGAGAT ACCAAAAGCC CTGGCTCCAC CCATACCCCT CGCCCTGAAA 7740
ACAGCTCTAG GAATTCGCGG GCCTAGCAAG GCTCCGGGAA GCTCCTTTTA AAGCTGTGAC 7800
GTTAGTAGGC ACATGGACCA TAGAGACCTA TCCAGGGCTC ATGGGACTTT AGTGATCCTG 7860
CCCTTCTCCC AAGGATCCCC CATGGCTGCA ACTTGAAAT TTCTGCAAAT GGAAGAGCTA 7920
CTCCTTAGGC ACGGTCATGT CTGAGCAGGG ATCTCCTGGG GCTTTCTTAG AATTCTCTCC 7980
CTGGGCACTG GGA CTCTTGA TTTCTTGAAT ATTATGTICC AGGTGGGTGT GGAGGAGGTG 8040
AGGGGATGTA AAGAAGGCTA GACTTGGCCA GCGCAGTGG CTCATGCCTG TAATCCCAGC 8100
ACTTTGGGAG GCTGAGGCGG GTGGATCACC TGAGGTCAGG AGTTCGAGAC CAGCCTGGCT 8160
AACATGGTGA AACCCCGTTT CTAATAAAAA TACAAAAAAT TAGCTGAGCA TGGTGGCAGC 8220
TGCCTGTAAT CCCAGCTACT CGGGAGGCTG AGGCAGGAGT ATCGCTGGAA CACGGGAGGC 8280
AGAGATTGCA GTGACCCGAG ATCGCGCCAC TGCCTCCAG CCTGGGCGAC ACAGCAAGAC 8340
TCTGTCTCAA AAAACAAAAA AGAAAGAAAA AAAGGAAAAG CTAAGACTTA CATGTGTCAC 8400
TTAACCCTT TTCTCAAACC TCTTCTCTT CCAGGAATAG TCAACCCTG GATGGCTTCA 8460
GGGAAGGGG GATCCTGAAG CCCAGGGCAG CCTCCAACCTC TACCCTTCC TCCTTTGAAG 8520
GATACTAAGG GGTCCAGAAA GGAGGGGCAG GACTGTGTTA CCCACCCAC ATCCCAGCAT 8580
CCACATTGCT CTCTGATGGT CAGGACAGAG CTTTCTCAGG GAGACCAGCC TGTCTGGAGC 8640
TGTGTCTCTT GGCCTCTTA AAGGGCCACT GAAGGTCCGT TCGTGGTCGT GAGGCACACT 8700
TTCAGGGAGC AGAGTGGTCT GTGTCTTCAC AGAGCCCGGA AAATGAACTA GTATGAACTT 8760
TGCCTCCAAG CAGCAGAACT TCTGTTCCTC CGCCCTAAT GGGTCTCTG GTTACTGCTC 8820
TACAGACAAT CATTCCGGTT CAGTATGAGA CAAGAATGGC CTGCGGGCTG GTCAGAGGTC 8880
ACGCCTACTC TGTCACGGGG CTGGATGAGG TAAGCCTGGT GGGGCTTGGT GGGGCAAGGG 8940
CACCTCCTG GGTAAACCTC ATGAAGTCAG GACTTAGCTG TTGGGGCCCC TGCCCTGTCT 9000
GCAGAGCTTG CCTCCAATCA GGACATTCAG TTCAAGGTCC AAGCCACGCC TGGGAGCAGA 9060
GGGGCCTGTG AAAGTGGTAG AGGTGGATCC TGCCACAGTT GGTGCACAGT TTATCTTTGC 9120
TTTTCGTGCT AAAGATGGCA ATTTTCCAA CATTTCATAT GAACAAATTG AAATATCACT 9180
TAACTTTGCT TTTACAAAGT TGGTTTCATG TGTTCTTGAG CTTCTGTTC TCTCGTGTTT 9240
AGATAGCTAC AGTTGTCTCT GGGTAGCCAC GGGGACTGGT TCCAGAAGCC CCAACAGTAA 9300

FIG. 8B/6

SUBSTITUTE SHEET (RULE 26)

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CAAAATCTGC AGATGCTCAA GTCCCTTCTG TAAATGGAG TAGTATTTGC ATATAACCTA 9360
TGCACATCCT CCCATATACT TTAAGTCATC TCTGGATTAC TTACGATACC TAACACAATG 9420
GAAATGCTAT GTAAATAGTT ATTGCACTGC ATTGGGTTTT TTTGGTATTA TTTTCTGTTG 9480
TTGTATTATT ATTTTTTCTT TTTTGAATA TTTTGATCC ACAATTGGTT ATATGCCAAA 9540
GCCATGGATA CGAGAGGCTG ACTGTTCTGT TTTGCTCCTT CTGGGACTTC TGGGTTTTCC 9600
TGGACCATGT CTGAGACAGG AACGTTGTAA GACCTGTTGC ACACAGTTGG GCAGGTTGTG 9660
CCCTGTACAG AGGGATGGGC TGAGAGGGGC AGTTGCCTGC ATCACCATT GCAGCAGACT 9720
GGAGGGAGTC TGCTTGTTG TAGTTCCTCA GTCAGCAGGG GCCTTTTGTC TTTCTTCCT 9780
TTCTTTTTT TTTTTTTTG AGACGGAGTC TCACTCTGTT GCCCAGGCTG GAGTGTAGTG 9840
GCACAGTCTC GGCTCACTGC AATGTCCGCC TCCTGGATTG AAGCGATTTT CCTGCCTCAG 9900
CCTCCTGAGT AGCTGGGATT ACAGGCGCGT GTCACCATGC CCAGCTAATT TTTGTATTTT 9960
TAGTAGAGAT GGGGGTTTCT CCATGTTGAT CAGGCTGGTC TCGAACTCCT GACCTCGTGA 10020
TCCGCCCACC TCGGCCTCTC AAAGTGCTGG GATTACAGGC GTGAGCCACC ACGCCTGGCC 10080
AGCAGGGGCC TTTTTTCTAA TTTATATGAA GACACCTAAT TTATATGTGT TAGCAAAGCC 10140
CTCCTGTTTA TGCCTCACCT CCTCCCCGA AGCTCATACG GCAGGATGTT CCTGAGAAAA 10200
TTGCCTCTTA GAAGATAGAG AGGAGATGCC AAGCCTAAGT TAGGCAGACT CAGGAGGATA 10260
GGTCTGACCC ACCCCTGCC ATTCCCCAGC ACACTTGTGA TTAATCTCCT TGGCCAGAGC 10320
CAGGCAGAAC ACCCTCGCGT AAGAGATTTG CCCCCAGCC CCGTCCCAGC CTCAGCTAG 10380
ACAGAAGATT CCCTTTCCAG AGAGGCTGCA GAGCATGAGA GCTCTTCTG TGTGCTTAAG 10440
GTCCCGTTCA AAGGTGAGAA AGTGAAGCTG GTGCGGCTGC GGAATCCGTG GGGCCAGGTG 10500
GAGTGGAACG GTTCTTGAG TGATAGGTAG GTGAGGGGAC CCCACGGGAT TGGCGGTGGC 10560
GGGGAACAGG GTCCGGGACA AGGCTGTGTT GGGAAGTGA CCATGAGAGT ATTGAAGATG 10620
CTTGGTATAA AATCACCCTC AAAACCAATG ATCCGCAGAG AAGAGGGGCA CAGGTGTTGG 10680
CTCCAGGGAA GGGCCAGGAG TGAAGCGGG GTGCTGGGGA CCCAGAGAGG TTGCTGACAA 10740
CCATTGGCTG GAAAGGAAGG ATTCCAGAAA GCGTGGGGA GGTCCAGGCA GAAAAAGCGT 10800
ATGAATGCAG GGTCTGGGC TAGAGAAAGT ACTTCCCTTC TTGGGGTCTT GTGTTGCCTT 10860
TCCTGTGAAA TGGGAACAGT ATTATTAGCA CTTACCTTGT GGGCTGATAT TGAGGAGTAA 10920

FIG.8B/7

SUBSTITUTE SHEET (RULE 26)

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CTGGGACTTG	TTTTTGGGCA	AGTGCTGAGC	CATTGCTAAG	ATTCCCCTTA	CCCGTGCTTG	10980
TCCCTTGTAT	TAAGGCACAA	GGGCCCTTTG	AAAAGAATT	TACCTGCTTT	ATCAATTGAA	11040
AGGGATTAAG	ACCTTGGGGG	CCAACCCAAA	ATAAACATGC	GAACCTATTA	TTTATAGGCT	11100
CCATGCACAC	TTCGTAAAAC	CTCCATGGTC	CTACTGGTTC	CTGATTACCT	CCACTCAATG	11160
AGAGGCAATT	CATTACTGAA	TGAGCCATAA	GCGCCTCTTA	TTTCGAGAGG	GGGATGGCAG	11220
GA CTCAGTCG	AGGAGAAGGA	CCGCACCCAG	GCAGCCTGGG	CCCCTCGGCT	CCTGTACTTA	11280
TTTACTGCTG	GGTACTTCCT	AGCCCAGCAT	GTAATTACTG	GTTTCGTTAG	TCATTGTTTT	11340
AGTAAATGTT	TCTTGGGCAC	CTACTACATA	GGAGGCACAG	GTCAAGGCAC	TGGGGATATT	11400
CTTTCTACCC	ACCCCTCCC	TCCCTACACT	GTGATTAGGG	ACTGACCGAT	C	11451

22/33

(2) INFORMATION POUR LA SEQ ID NO: 3:

(i) CARACTERISTIQUES DE LA SEQUENCE:

(A) LONGUEUR: 1834 paires de bases

(B) TYPE: acide nucléique

(C) NOMBRE DE BRINS: double

(D) CONFIGURATION: linéaire

(ii) TYPE DE MOLECULE: ADN (génomique)

(xi) DESCRIPTION DE LA SEQUENCE: SEQ ID NO: 3:

ATTTTTTTTT TTTTTTTTGA GACGGAGTCT CACTCTGCCA CCCAGGCTGG AGTGCAATGG 60
 CGCGATCTTG GCTCACTGCA ACCTCCGCCT CCCGGGTTCA AGTGATTCTT CTGCCTTAGC 120
 CTCCTGAGTA GCTGAGACTA TAGGTGCCCC CCACCAGGCC CAGCTAATTT TTGTATTTTT 180
 ATTAGGACGG GGTTTCACCA TATTGGCCAG GCTGGTCTCG AAATCCTGAC CTTGTGATCC 240
 GCCCACCTCG GCCTCCCAA GTGCTGGGAT TACAGGTGTG AGCCATTGCG AGCAGCCCAG 300
 AACTCAATTC TTAACCTTTA AAGTATGATG AGAAGAAGGA TCAAGCCCTC ACCAGCCCAT 360
 TTAAGGAGTT TAGGCTCACT CTTGAGGATG TGAGAAGTCA TTGCTATTGG GTTTCACACT 420
 GAGGTAAACA GGTGAAGTCA GCATTTTGGT AGTTCACAGC AGCTGCAACT CTTTGTATTT 480
 CTCTGATACC TCCTGTCCCA ACCTACATCA GGCCTTCCCT TCTTCCTGCT TCCTTAATTC 540
 CTCCATTTTC CCACCAGATG GAAGGACTGG AGCTTTGTGG ACAAAGATGA GAAGGCCCCGT 600
 CTGCAGCACC AGGTCACTGA GGATGGAGAG TTCTGGTGAG TCCAGAACCC AGGAAGACCC 660
 AGAAGGGTAA GGGTGGGGAA GAGAGGGGAA ATCTCAGACC TCAGTCCCCA GCTAAGGTTA 720
 TCAGATTCCA GCCCTTGGGA GATCTTGGCT GTGTTCTCCT CCAGCCCAAG GCCCAGCAAG 780
 GATGAGGTTT TGAGAGGAGC CTTCCAGGCC ACAGGGACAA TGAGCCCAGG ACCAGGCCAA 840
 CATGACATGG CTCTTGCTC CTGTGTGCCC CTCCGCCACA CACTCTATTC CAGCCACAGG 900
 CACCCTGGCC TTAGCACAAT TCTTTTCTGA GCCTAGGAAG CTCCACTTAC CCTGATCTTC 960
 CAACGTCAAC CTCACCCTCT CTCAGGTTGT TTCTATTAG GCTTCAAGTC TCAGCTTAAG 1020
 GAGAATTTTC AAGTCTCAGC TTAAGGAGAG CCCCTAAGT TCCCCGAGGA CTGGGATTAA 1080
 TTTATGATGC TCATCACCCT TAAAATTGTT TGCTTAAGCC GGGCGCGGTG GCTCACGCCT 1140
 GTAATCCCAG CACTTTGGGA GGCCGAGGTG AACGGATCAC GAGGTCAGGA GATCGAGAAC 1200

FIG. 8C/1

SUBSTITUTE SHEET (RULE 26)

08/836734-070297

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ATCTTGGCTA ACACGGTGAA ACCCTGTCTG TACTAAAAAT ACACAAAAAA AGTAGCCGGG	1260
CGTGGCAGCG TCGCCTGTA GTCCTAGCTG CTGGGGAGGC TGAGGCAGGA GAATCACTTG	1320
AACCTGGGAG GCAGAGGTTA CAGTGAGCCC AGATTGCGCC ACTGCACTCC AGCCTGGGCG	1380
ACAAGAGAGA CTCTGTCTTG GAAAAAAAAA AAAAAATGTG GTCTTAGTTT AATGTCAAGG	1440
GAAAGGTTTT GGGTGTTTTT ATTACTTTAT TTTTATTTA AAAACTATAA TAGAGACGGG	1500
CCTCGCTATA TTTCTCGGGC TGGTCTCAA CTCCTGGGCT CAAGCGGTCC TCCACCTTG	1560
GCCTCCCAA ATGCTGGCAT GTGGGCCTGG TCAACATATG GGACCCCAAC TCTACAAAAA	1620
ATTTTAAAAT TAGCCAGATG TGGTGGCGTG TGCCTGTAGT CCCAGCTACT TGGGAGGCTG	1680
AAGCAGGGGG TCACTTGAGC CCAGGAGGTT GAGGCTGCAG TGAAGTATGA TTGTCGTTCA	1740
CTTTTCTTCT GAACGTGAGA TTAAGTGTAG TCAGCAATTT GGCTTAGGAT TATTTATTCA	1800
GAATTTTAA CCGTCACGTT GCGGCAAACC AGGT	1834

FIG. 8C/2

SUBSTITUTE SHEET (RULE 26)

462070-4295888

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(2) INFORMATION POUR LA SEQ ID NO: 4:

(i) CARACTERISTIQUES DE LA SEQUENCE:

- (A) LONGUEUR: 14664 paires de bases
- (B) TYPE: acide nucléique
- (C) NOMBRE DE BRINS: double
- (D) CONFIGURATION: linéaire

(ii) TYPE DE MOLECULE: ADN (génomique)

(xi) DESCRIPTION DE LA SEQUENCE: SEQ ID NO: 4:

AGGAGGTGGA GGTTCAGTG AGCCAAGATC ATGCCACTGC ACTCTAGCCT GGGCAACAGA	60
GCGAGACTCT GTCTCAAAA ATACACACAC ACACACACAC ACACACACAC ACACACACAC	120
ACACACATAT ATATACACAC ATATATATAC ACACACATAT ACACACACAC ACGTCTGTAT	180
ATATATGTGT GTGTGTATAT ATACACACAC ACACTATTCT ATATATTCTT GTAGAGCTAT	240
GTGTGTCTCC TGTGCTATTG AGCATGAGCC CTTTTTTTTT TTTTTTTTTT TTGAGACAGA	300
GTCTCACTTT GTCGCCCAGG CTGGCATACA ATGGCGCAAT ATCGGCTCAC TGCAACCTCC	360
GCCTCCTGGG TTCAAGTGAT TCTCCTGCCT CAGCCTCCCA AGTAACTAGG ATTACAAGTC	420
CCCGCCATAA TGCTCAGCTA ATTTTTGTAT TTTCAGTAGA GATGGGGTTT CACCATGTTG	480
GCCAAGCTGG TCTCAAACCTC CTAGCCTCAG GTGATCCACC TGCCTCAGCC TCCCAAAGTG	540
CTGGGATTAC AGGCATGAGC CACAGCACCC TGGTGAGCAC TAGAGCTTAT TTCTTCTATC	600
TAAGTGTATT TTTGTATCCA TTAGCCACCC TCTTTTCATC CTCCCCTCTC CTCCCTTCC	660
CAGCCTCTGG TAACCACTGT CTGCTCTCTA CTTCCATGAC ATATGCTTTG TTTAGCTCT	720
CACATATGAG TGAGAGCATG CGACATTTAT CTTTCTGGCC CTGGCACATT TTTGAATCAT	780
TGTTAGAAAA GATGATGGTT TGGAGTAGAT ACATCAGAAG TGACAGCGTT TGCCCTAAAA	840
AGGAAAGACA GGCTCCTCTG GGACCCTGAC CAAGTTCCTG TGAAGTATT TATTATTGTG	900
CTGTGTTAGT CCTGGGGTCT TCCGTTCCCA GCCCTCCTCA CCTGCTCCCA TATGGCTCTC	960
TCTCTTCTTC CAACCTCTCA GGATGTCCTA TGAGGATTTT ATCTACCATT TCACAAAGTT	1020
GGAGATCTGC AACCTCACGG CCGATGCTCT GCAGTCTGAC AAGCTTCAGA CCTGGACAGT	1080
GTCTGTGAAC GAGGGCCGCT GGGTACGGGG TTGCTCTGCC GGAGGCTGCC GCAACTTCCC	1140
AGGTGGGAGA TGCTCTTGAT GGGGGGAGGG TCTAAGCCGA AAAAGTTCCA GGCAGAAGAA	1200

FIG. 8D/1

SUBSTITUTE SHEET (RULE 26)

152000-45-195000

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TGAGAGGAGA AGAGGCCAG GACCAGATTC TAGTCACCAA CAGCGTTTAA GGGGCAGGTA	2880
AGGAAAACAA AACCATCAGC AAAGACTGAG AATGAAAGCC CAGAGAGGAA GGAAAAGCCA	2940
CACATACAAT CAGTACAGCT CCATCTGAAT AAAGGTAGCG CCCCCCCCCC CCCAAATCAT	3000
TAGAGAAATG CCTGATTGGG TTTTCTGTGG ATTTTTCCTA AGAACCTAGA TGTGGGGAAT	3060
AGAAATAAAT GGTTCCTCT GTCTCATCCC CTCCCTGCCC TCTGAGAGGA AGCTGTGATT	3120
GCGTGCTCCC TTTCTGGGGG TGCAGATACT TTCTGGACCA ACCCTCAGTA CCGTCCGAAG	3180
CTCCTGGAGG AGGACGATGA CCCTGATGAC TCGGAGGTGA TTTGCAGCTT CCTGGTGGCC	3240
CTGATGCAGA AGAACCGGCG GAAGGACCGG AAGCTAGGGG CCAGTCTCTT CACCATTGCC	3300
TTGCCATCT ACGAGGTGTG TAGTCCTGAT TGGCTCCAGC CCAGGAAACA TACTTTCCCA	3360
GAGAGGACGC TTCCAGGGGC TTCTAGAGGG GCCCTCTGCT TCCTCAATAC CAGTGACCCA	3420
CAGAGCTCCT GGTATCAGGA CCACTTGTGT TTGTAACAAG CAAAAAATAC CAGGGGGGGC	3480
ATTAGAGAGG CAGTGGAGCG GGCCTGGCAG AACAGGTGCC TGGGGGTCAG GCTTCCGCAT	3540
GCGGGCTGCA GTTGCTGGCA TTGCCTTCCG CAGGCTCCTC ATCCTCATTG ACATCTGAAG	3600
CATCTTCCTT TCTGTTTCTT CTCAAGGTTT CCAAAGAGGT ATAGCAGCAG CAGCGGCCAG	3660
CAGTTGTGTG CAGCACTACC CAGGGGGGGC CGACTCTGTC TGTGGCTCGT CGAGAAGCTT	3720
CCTGGTGGGG TTTGTGGGCA GGACTTGTGA TAGGAGAGGG CCTTGCCTGT TGTTATTTCC	3780
CACTTGCAGA GCAGGTGGCC TCAGGGCATT GCATGACCCA TGA CTACCAC CCCAGGATG	3840
TGCACTTTCT CCCTCGCACC AGACACTGCA CGTCACACAC ATGCCTTTGC AACTCACCC	3900
TCCTCCACGC TTACAGCCAC ACACACAGTC ACACAGACGC GTTCTGAGGG TGGCTGCCCG	3960
CTTGGGATGG AGGAATCACT TCCCTCAGAA CCCAGCCAAG TCCTCTAGGC CTCCTTGGGG	4020
GTCTTCCAG CCTGAGGGGC TTCGGAGCTG AGGACAGCTG TTCTGGTAAG TGTCCCTGAG	4080
TGTGGGGATG ACACATTTCC ATTCACTCTG AATCACAACA GAAAAGGGAA GAGGAATTGA	4140
GGTAGGGAGC CTATTTAACC CTGGGAGTC GGGAAGTAGG GAGGTTGAAA CTGTGACATG	4200
GGTGACCAGG GAGTTGGGAA GGGACCCTTG GAGGTGGCTG TGGCAGGACA GGACGTTCTT	4260
CCCAGGGGGC TCATGTGCCC TGGGCTCTCC CCATCTCTCA GATGCACGGG AACAAAGCAGC	4320
ACCTGCAGAA GGACTTCTTC CTGTACAACG CCTCCAAGGC CAGGAGCAAA ACCTACATCA	4380
ACATGCGGGA GGTGTCCCAG CGCTTCCGCC TGCCTCCCAG CGAGTACGTC ATCGTGCCCT	4440

FIG. 8D/3

SUBSTITUTE SHEET (RULE 26)

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CCACCTACGA GCCCCACCAG GAGGGGGAAT TCATCCTCCG GGTCTTCTCT GAAAAGAGGA 4500
 ACCTCTCTGA GTGAGTGCTG GCCCAGCTTT CCCACGTGTT TCTAAAAGCT CACATGGCCC 4560
 ACTCCAGAGG TTGAAGGCAT GAGGCAGCTA GACACGTCTC CTCCAGGGTC CTTCTGCTGC 4620
 TCCTGAGCCA CTGGCCACAT TACCCCCATT CATTCAATTCA TCCATTCTGT GATATTTATT 4680
 GAGCACCTAC TATGTTCCAG GCACTGTCCT AGGCACTAAG GATAGAGTAG TGAAGTAAAC 4740
 AGAAAGAAAT CCCTGCCTTC ATGGAGCTTA ATATTCTAAC ATGAGACAAT AATGGATAGG 4800
 AAAACATAT GTAGCATGTT AGATTTGGAG AGGTGATATG GAGCAAAAAT AAAGTAGGGA 4860
 AGAGGGATAG GAGGTGTTGG GGATGCTTGA AATTTTAGGT TAGCATGGCC AGGAAAGCCA 4920
 CATCCTGTCC CTGGCCACCA CAGATGAGCT CATAGCCCCT GCCACTCTGA TCTCTGTCCT 4980
 TGGAAGATGC ACCAGGTCCA TGGGTAGGTG GCTGGGTCAT GCCTTTGGGG GGCTCTGAGC 5040
 AATACTAACA AGAACCTGCG TGCCTGGGCT TGGCTGTCGG GGATGGTGCT GACATGGGGC 5100
 TGGTTCCTGG GGTGTTTTGG TTCCAGGGGT TCTCTAGAGG CTGGTTCCTG CTTGGCTGCC 5160
 AGGAAGCCGT GCACCAGAGC AAACCGTCCA CGGGCCTCCT GCTTGCTTCT GGTGACACTG 5220
 AGACCCACCA TGTCTGTATT CCTCACAGGG AAGTTGAAAA TACCATCTCC GTGGATCGGC 5280
 CAGTGGTGAG TGGTTTAGAT CTTCTGTGCG AAAAGTCCAG AGGGTCCCCT TCCCTGACCA 5340
 TGCAGGGGAC AGATGGTGCA GGGGAGAATG GGCAGTGGCA GAGGGAATGG GAGTCTGGGC 5400
 TGTGCTGAGC AGTCCCTCCT TGGCACTGCA AATCCTACTT TGGCATGGCC AGAAGTAATC 5460
 GGCCTTAAGC ACCGGGGGCC ATTGAGGCAG TTCAGGGGCT GGGAAATATG GAAGAGGGTC 5520
 CTGGAAAGGA GAAGCAATTT GAACAATCGG AGGGAACAAG GCCACAGGAA GGGATGACAA 5580
 GAGCCGCAGC GAACACTGGA TTCTGAGACT GGATAACATT GGATTTTACA CATAGAGAAA 5640
 AGAAAGTAAG CTGGTGCCGG ACCTGGTGTT GACACTTGGA TCCTCCACTT ACCAGCGGGG 5700
 TGACCTGGAC AATTTCTGTA ATCCCTCTCA CTCAGTTTCC TACTCAGTAA AACGGGGATG 5760
 ATAATGTGCC TTGCAAGGCT TTTGTGAGGC TTCATCAATG AGGTGATGTA TGTGAAGTGT 5820
 CTGGCACAGC ATGGGCACTC AAACAGAGGT GCTTTTTTAC ACTTTACACC TTACAAGGTA 5880
 CTTTTCACAT GTGTCATCGC GATACTTGCA AGTTGCTGA GAGGTAGATG GGGTTATAAT 5940
 CCCTGGTGTT CAAGAAAGGA AGCAGAGGCT CAATGGGGTT GAATGACTTC TCTGAGTTCA 6000
 CAGAGCTCAG TAAGTGGCAG GGTGTTGGAAC TCACATTCAG ACTCTCTGAC TCCAGACTTA 6060

FIG. 8D/4

SUBSTITUTE SHEET (RULE 26)

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 FOI/EP95/04575

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GGTTTTTCCG CACCTCCACG CTGAGGCCAG CCCCAGGCAG TGAGAAGCCC AAAGTCCGAA 6120
GCACAGAGTG CTGTGTGTTG GGCTCTGTGT GTTGAGGAGT CTTGTGACTG CCTTGGGGCT 6180
TTGGGCTGTA GTCAGCTGAC AGTCCTTTGT GCTCTGTGGG GATGACGTAG GCCAATGGGA 6240
GGACAAATGC CCCTCTGAAC TGTCTTCTGG GCAGTGACAG TCATGGTCAT AATCCTGACC 6300
CTGAGCCAGT GCCAGGTCTC CAAGTGCCTT CTGAATGACC ACAGGCGATT GGTTTTAGTG 6360
GTAGGTGCGT GGGGATCTGT TCTGGTCATC TGGATGCTGG TCATCGGGTG CAGTATTGAT 6420
CAGGACCTGC AAACCCAAAA GCTTATGGGA GCTGGCACGT CACGTGAGTA GAGCAGGCAG 6480
GTGCAGGGTT TTTGATGTCC CTGCACTGAC ACAGTTGTCT GCAGTTCTCC AATTTGACAT 6540
TTGGGCTCCA GTGTCGAGGG TCAAACAAGG AATTTTGGGG CGTGGGCCAA ATCTGGGAAG 6600
ACACAGGGAG CAGGGCCCTT TGGCTCAAGC TGATAGTTGC CGCAGGGATT ACCAGGCCCA 6660
GGGCAGCCTG CCACAAGCTG GGGCTTTTAC CAAAGAAAAT CTCCCTATGT TAAATGCTTG 6720
CTCAAAAATT TTTAAAAAAT ATTCTGTAAG TCAAAATCCA TTGTTAGGTC AGTTTGAGAG 6780
AGCCATGTTT TTGGTGTTTT AGTAACCAAT TTCATTTTTT TATTATTTAT TTATTTGTTT 6840
ATTTTTGAGA CGGAGTTTCA CTCTTGTCAC CCAGGCTGGA GTGCAATGCC ATGATCTCAG 6900
CTCACTGCAA CCTCCGCCTC CCGGGTTCAA GCAATTCTCC TGCCTCAGCC TCCTGAGTAG 6960
CTGAGATTAC AGGTGCCCAC CATCAGCCTT GGATAATTTT TGTATTTTTT AGTCGAGATG 7020
GGGTTTCACC ATGTTGGCCA GGATAGTCCT GAACTACTGA CCTCAGATAA TCCGCCCACC 7080
TCAGCCTCCC AAAGTGCTGG GATTACAGGC ATGAGCCAGC ACGCCCGGCC ACCAATTICA 7140
TTTTTTAAAA AAGGAAGAAA GAAAACCTTA GCCAGAAGAT CTTTTTCCTT GCCATAIGCA 7200
GTAAGAGTAG ATTATAAAAA CAAAGTCAGA GCAGTCACTG GTGTCTGGGC ATGGAGGAGA 7260
AAGAAGAATT CTCTTCTCCC TTCACCCTCC ATGCCCTTTT TTGGCTCCAT GTGATTCAGA 7320
TTTCTGGACC CTGGAGCCCC ACCCCAAGCT AAAGACCAGG ATACAGGGAA GCCACAACCA 7380
CTGGCGGTTT TGAGAACTTA CTTTTCACCTT ATTCTGCATT TACTGTTTCC TTTTCTTATG 7440
CAGAAAAAGA AAAAAACCAA GGTAGGTGTG TGGGTAGAGA GCATGAAGTG TGTGTACTCA 7500
TGCATATGTA TGTGCATGCA TGTGAAGTGT GCATGTGTGA GCTCATATGC ATCCATGCAC 7560
CAGACTTGCC TCTTCCTCCC CCTCCTTCTT GAGCTTCTGC TGGGGCCGAG CGTGCAGTAA 7620
TGACAACTAC GATTTGCTGG GGGAAGGCTA CGTGCCAAGC ACTCTTTTAG GTGCTTTCCA 7680

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TGATTAATTC CTTCTCACA ACAGCCCTAT GAGATTAGTA CTATAACTAT CCCCATTTC 7740
AGAGGGAGAA AAGGTACAGA CTTGACTAAC TTGCCCAAGG CCACACAGCC AGAGAGGGGC 7800
AGAGCCAGTA CTTAGAGCCA GGCAGTCTGG GTCCAGAGTC CGTGTCTGA ACCACAAGAG 7860
GCCATCATAC GCCATCAGAT TTGGTGCTAG CATTCTGCTG GGTGCCTGGT GGTGATGGAT 7920
CCATCACAGG GGTCTCCAG GTACTGGTGC TGGCCAGAC CAGAGCTGAC ACTCCTCAGG 7980
CACTACCACA TTCCAGGCAC TGTGCTTGGG GTCAGTCCCT CTCTTTTTTT TCCCCCCAA 8040
TTATAACAGT ATCTACAAAG TAGGTGCTGT TATTTTCCC CTTTCACAGG TGAGATAGAC 8100
TCAAAGAAGT GAACTTGCCC AAGGAACAGA ACTAATGAGT GGGGAAAATG GAACTGGAAA 8160
CCATGTCTGT TTA CTCCAAA ACCTGTGTTT CTTGCCCTCT TTCTCTGATG CCAGCCCCCT 8220
ACACTTCAAG GCCTGTGTTG TCCAGACCCA CACTCGGGCC TGCCAGTGTG TGCCTGGCAG 8280
GGATGCTCCA TGGCCACACC ATATCCATCC TACACATCCC CCCTCAGACT GTGACCTCCA 8340
TTTGCTCTGG GATCCCCACA AGCTTCAGCT GCTTGAGCAA GACACTGCTT AGAAGGCAGA 8400
GCAAGCCAAG GCCTCTGGGG CCTGCTGGGA GCCAAAGCTG GGGAGCCGT TCCACGGGTC 8460
TATCTGCTTG AGCTGTCTA GATGAGCAGC ATGGAAGGGC AGTGGTGCAT GAGTCCAGGC 8520
GGGCTGCTTT TCTGCTCCGA GAGGCTCTGC CTGCCAGTT GTTCTCTGCA TTGCAGCCTC 8580
AATCCCCACA GCCTTGCTT CCCCCGGCTT TCCCTACAGG TGCACCGCAT CCACAGTGTT 8640
GGCACCATGC ACCAGCCGCT CTCCGTCTT TTCATATCCT TGTCACCTGC ACGAGCATGT 8700
CTTGAAAATA TCCCTTGTTT GTGTAGCATC TAAATGTTT TTGCAGTATG ATTTTGCATT 8760
CAGTATCTCA TTGATCCCC ACAAGAGCCC TATGAGGAGG GAAAGCAGAT TTTACCATT 8820
AAGGATGAGT AACTGAGGC CAGAGAGGAT ATTTTGGTT TTTTGTAGA CAGTCTCACT 8880
CTGTCACCCA GCCTGGAGTG CAGTGGCTTG ATCTGGCTC ACTGCAAGCT CCACCTCCCA 8940
TGTTACACC ATTTTCCTGC CTCAGCCTCC CAAGTAGCTG GGA CTACAGG CACCCACCAC 9000
CACACCCAGC TAATTTTTTT GTATCTTTAG TAGAGATGGG GTTTCACCCA GTTAGCCAGG 9060
ATGGTCTTGA TCTCTGACC TTGTGATCTG CCTGCTTCGG CCTCCTAAAG TGCTGGGATT 9120
ACAGGCGTGA ACCCCCCTGC CCGGCCAGAG AGGATATTTT TTAATGAGGG GCAGGGCTGG 9180
GATTCCAGCC CAGTGTCTG ATGGCTCACC CACTGACCAT TCCACTAATC CGTGTCTTT 9240
TTCAATCTAA ACTTTCAGGG TTGTAGAGGT TCCTTTGAGG TGCCTCAGTA CTTCCATGGT 9300

FIG. 8D/6

SUBSTITUTE SHEET (RULE 26)

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GATGTGGGGT CTGAGGGCCA AGAGCTCTGT TCTCATTAAAT CAGAGAAGCT TGTGTTTTTA	9360
AAAACACCAT GTTACTGCA GGAAATTTAA TTGGACAGTG TTTCCATCTG GAAAAAAAAA	9420
AGTCTACAAA ATACTTGACA ATCACTGCAC TAGATCATGC TGCTTTTAGC ATTCTTAGCA	9480
TTTCACGTGC TGAGCTCTCA ATACTCTACC ATGAGGAGGG ATGGAGTGGG TATGAAAAGA	9540
TAAAGAACTG AAGTCACACG GCTTGTCAGT GGCAGAGATA GAGCTTGAAC CGAGGTTGAA	9600
GAGCTCCCGC CTATTCCTTT CCTCTTCTCA CTGGATAAAG CTGCTCCAAG AGAGGTGCTG	9660
CCTCAGTGTG CCTGTTTACA CTGTAATCCT CCCTTCCTTC CTGCCTCCTC CCTCCTCTCT	9720
CCAGCCCATC ATCTTCGTTT CGGACAGAGC AAACAGCAAC AAGGAGCTGG GTGTGGACCA	9780
GGAGTCAGAG GAGGGCAAAG GCAAAACAAG CCCTGATAAG CAAAAGCAGT CCCCACAGGT	9840
GTCTGGGCAT GTGGCATGGG TGGGGTGGCC AGCAGGCTAC AGGGGCTTCC TATGCGCTTG	9900
GGATACACAG GGGCTGGAGG CTTCCCAGGA GTTTGTCTTG AACATCTGGA GGTTTGAATT	9960
TGTCCCCTG ACCTTTTCTT TCAGCAAGTT CCCCTGAAAT TTGGGCTGCT GCTTGGGTGA	10020
ATATCCCAGG ATGGGGGTTT CATTCTAGGA GTGGACTGGC AGGCTGAGCC TCCCATGGAG	10080
CTGATCCAGC CAGGATACAG AGAAGGGGAG GCAAAGGCTG AGACAGAACC AGCTTGAGAG	10140
CGGAGGCGCA ACTCTTGTCT CCTGGTGGCC TTGAGCATTT CACAATAGGG GGATAAAGGA	10200
TAGGAGCAGA AAAGTGGGGC TGACTTCAGA AATGGGGTCC TCTAGAGCTC ACGGGAGGGT	10260
GTTAGATTGG AGTGGGAGCT TAGTGGAGGT GAGCCTTAGA GGCAAAAGTC TCCAGACCAA	10320
TCCAGGCCCC CTCTTCTATC CGGGGGCCCC TCTTCTATCC AGGGCCCCCTC TTCTGTCTGG	10380
GAGCCCCTCT TCTATCTGGG GCCTCATGCA GTGGGGCCTA GGGGAGGTTC TCTGAGGACT	10440
TGGCCTTGAT GACAGGGTGG CTGGAGGAAT CAGAACGGTC AGACCTTCTT TGACCTGCGG	10500
GCACCTTTAG TTGGAATGCT CAGGCCTGGG ATGGTGGAGG GGGCTCTTGC AGGTGGGGAC	10560
TGGGGTGGCG GGGAGGAGGC TGTATGGCCG CCATATCTCC TTTGGCTGGG GGCGTCAGGG	10620
CTGGAGAGGT GTGAAGAGTC CCTGAGGCCT CGATGCATCT CACTCCAGCT CACCAGGTCT	10680
GCATTTGCCC GTCCCCAGCT CCTGCTGCCA CCCCCGGCCG TTTTAGGCAC TTGGCTCCCT	10740
TGGCCCAGAG GAGCTTGCTT CACAGGCCTG TGCACCTCTG ACCCCTGTGA ACCAGTTTTT	10800
CTTTGTGCCT CCACAGCCAC AGCCTGGCAA CTCTGATCAG GAAAGTGAGG AACAGCAACA	10860
ATTCCGGAAC ATTTTCAAGC AGATAGCAGG AGATGTGAGT ACCTCCAAGC CCAGGACGCC	10920

FIG. 8D/7

SUBSTITUTE SHEET (RULE 26)

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CACAGGTGCT TCCTTCTCTC CTGGATTAACT TGCTCAGATT ACCAATTATT TCATTATTGT 10980
TTGGTAGAGG TCACTTTTGA CTTCGGTGGA GCCAGGGGAT GTGTGCGTAG CACACAAATC 11040
CACAAGCCCT TGAGTTTTTG ACTGCCACGT CTGCTGGGGG GCTCAGAGGC CTTTTTGCTC 11100
TGAGCTGCCC ACGGTGGTCC TGATAGCTGA GGTGCAGTAT CTGGCCCCCT GTCTTCCTCA 11160
GAAAAGCCCC AGCTTCCCAT GACATAATAG CACCGACAGG GATTTTACAA ACACAGCCAG 11220
GTGGAATTG TTTTGCAAAG TGTCCGCGCC AGGAGCTGCT GTACTCCTGA ACCATGACCC 11280
TCCTCTCCCT TCCTCCTCAG GACATGGAGA TCTGTGCAGA TGAGCTCAAG AAGGTCCTTA 11340
ACACAGTCGT GAACAAACGT GAGTTGCTCA AACCAAATGG GGGTGGGGTG GGTGGGGAGT 11400
CCCGTTGTCT CAAAGCAGCT CCTCACTCTT CTCCATCCCC CCAGACAAGG ACCTGAAGAC 11460
ACACGGGTTT CAACTGGAGT CCTGCCGTAG CATGATTGCG CTCATGGATG TATCCTTCCT 11520
GCCGCCCTT CCGGACCCTC TGTCATCAGC CCACGGGGGC CAAGGCAACA TACAGGGTGC 11580
CCAGTCAGGC AAAGGGCCCT AATTGTGCTC CAGGGAACT TAAGGAGACC CTGATTCAGA 11640
ACATCTTGGA TACTCGTCTG AAAGGGGTTG TTAGAGGCGG AAGGGGAGGA TGTGGGTTG 11700
TAACTGCCCT AACCCTGTG CTCTCTCAG GCCTGGGATC CTGCCCAAGC AAAAGTGGTC 11760
CTTAGGAGAG CGGCTCCTGG GTTACAGAGT AGGCGCAATC TCTGACTGGT GGTGGAGTGG 11820
AGGGGAGGGT TAAATAGTAC AACAGGGCAG TGGGTAGGAC AGCCCGGAGT CTCCTAGACC 11880
CTCCCTCCAA ATCCAGGGGG ATTTTGCTGT GTGCTGTGTA GCCCTGACCT CCCTCCTCCA 11940
GACAGATGGC TCTGGAAGC TCAACCTGCA GGAGTTCCAC CACCTCTGGA ACAAGATTAA 12000
GGCCTGGCAG GTGGGAAGAG AAAATGAAGC GTGGGAGTCA AGAATGGGGT TGATTGAGAG 12060
ATTCAGTGTG TGACCTCCAT CCTCAAATTT TCTATTGCCA GAAAATTTTC AAACACTATG 12120
ACACAGACCA GTCCGGCACC ATCAACAGCT ACGAGATGCG AAATGCAGTC AACGACGCAG 12180
GTGCTGAGAA GGAAGGGGTG TCAGGGATGT GGACCCGAGA CGGTGGGAGC AGGAATGGGA 12240
GGGGACTAGC TACTAGGGCC CCACTAGAGA AGGAGAGGGA AAGGGCTTCT CACTTCCCT 12300
TCCCAGGTCA CAGAGTGTCC GAGAGGCAGG GAAAATAGAA GACAGGCCCA AGGCCTCCAG 12360
CTCCACGTCC ACCTCTAACA TGGTCCCCTC CACAGGATTC CACCTCAACA ACCAGCTCTA 12420
TGACATCATT ACCATGCGGT ACGCAGACAA ACACATGAAC ATCGACTTTG ACAGTTTCAT 12480
CTGCTGCTTC GTTAGGCTGG AGGGCATGTT CAGTAAGTGG GAGAGGGGGG CTGCCCTCTG 12540

FIG. 8D/8

SUBSTITUTE SHEET (RULE 26)

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CTCTCTTGCA GGGGCAGTTG TGGCAACAGG CATCTCACCT GATAATCTCC AGTCTGCTCC 12600
ATCCAGGCTG AACAAGGGCC AATGACCTCT TTAGGCCCAG AATGGGATGG CAAAGGGAGG 12660
GTTACTGGTG ATTCTCTGCC TGCACATCTT TGTGCTGATG AGGGACAGCA CTGGGCACAC 12720
GGTCCTCTGA GGGGAAGTTA CAGTAGTAGA GGCGGAGTGC GCCTGTAACT GGCCTCTGGC 12780
CTGTGCATTG TTTCACAGGA GCTTCTCATG CATTGACAA GGATGGAGAT GGTATCATCA 12840
AGCTCAACGT TCTGGAGGTA AAGCATAGGC ACAGCACATT CCCCTACAC ATTAAAACTC 12900
AAGGTGGAGG GGTCAACGGG GCGGACTGGA CCCAGGGTGT GCTCCTCATT TCCACACAGT 12960
GGTGGAGGGA AGGGATAGGA ACAGAACATG GAGGGAGGCT CAGCAGGCTC CCAGGACACA 13020
TGCACTTGAG GCCCAAAGG ACCTCTGCTC CCCAGTCAC TTGATGCGGG AAAACATGCA 13080
CCTTCTTAGG GAAGATCTAG GAGAAAGGAA ACAGTAAGCC ACTGCTTCTT GGAAAATCTT 13140
CTGGGGGTCT GACCTGCTGG GACTGTTCCC TTTCTCTTG CCCCGTAAGA TTCCTAGGGC 13200
GGGGGGGGG GGGGGTCACT CTTTCTGAT CTACATTCTG ATCTTGGGAC TTCTTTCAGT 13260
GGCTGCAGCT CACCATGTAT GCCTGAACCA GGCTGGCCTC ATCCAAAGCC ATGCAGGATC 13320
ACTCAGGATT TCACTTTCAC CCTCTATTTT CAAAGCCATT TACCTCAAAG GACCCAGCAG 13380
CTACACCCCT ACAGGCTTCC AGGCACCTCA TCAGTCATGT TCCTCCTCCA TTTTACCCCC 13440
TACCCATCCT TGATCGGTCA TGCCTAGCCT GACCCTTTAG TAAAGCAATG AGGTAGGAAG 13500
AACAAACCCT TGTCCCTTTG CCATGTGGAG GAAAGTGCCT GCCTCTGGTC CGAGCCGCCT 13560
CGGTTCTGAA GCGAGTGCTC CTGCTTACCT TGCTCTAGGC TGTCTGCAGA AGCACCTGCC 13620
GGTGGCACTC AGCACCTCCT TGTGCTAGAG CCCTCCATCA CCTTCACGCT GTCCCACCAT 13680
GGGCCAGGAA CCAAACCAGC ACTGGGTTCT ACTGCTGTGG GGTAAACTAA CTCAGTGGA 13740
TAGGGCTGGT TACTTTGGGC TGTCCAATC ATAAGTTTGG CTGCATTTTG AAAAAAGCTG 13800
ATCTAAATAA AGGCATGTGT ATGGCTGGTC CCCTTGTGTT TTGTTGTCTC ACATTTAGAT 13860
ATCAGCCATG CATGACTGAA TGGCTTCCAA TCATATACTC ACCTATCACC TACAAGAGAA 13920
CAATGAAAAA CACACACAAA AACAAAATCT TGAATTTTGT AATCATGCCT ATTGCTATTT 13980
CTTGAGCATA AGAATGGCTC AGATACTTTC CAAGACATAA AAGGAAGGCA GAGGAATAGT 14040
TGTTGCTGTA AAAGACATCA AGAATAAATG GGGTCATGTA CAACGGGAGG GGCCGGTTAC 14100
CTGAATAATG GAGTGGAGAT TGAGCTATCC TAGCTCCTCT GCTCACTAAC TGACCTGTCTG 14160

FIG. 8D/9

SUBSTITUTE SHEET (RULE 26)

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CATGACCGTG GACAAAACCC TGAACGCAGC TGTGTTGTTG CTAAACTTCT CTGGACCATG	14220
GCCTGCGGCA TATCTATAGG CATCCTGTGT TTTCCACCCA GTTTCCTTCT TCCTCGCTAA	14280
GCCAACGTGG AAAGGGCTGG CCGTGAATAT GCAGACAAGG TAACGAAAGT AAACCGTCAA	14340
TTAGTAAAAG TACTTCATTT TCCTCTTGTA TTTGCTTCAT TCTTGCTTCA CAAAGTTACG	14400
AAGTCCACAG CTTTATACCA AAATGTAAGA AGGCTATTTG CTTATAAACA TTTTGAGTCA	14460
GGTGTCACT CTGATTCATTC TTCTAATCCA TATTCAATAT TAAAAAATCA GAAACCAAGG	14520
GTGCTGGAGC AGCTCTAGGG CATATATTTT TCTTAAATAG GAGAAAGATT TTCAACAGCT	14580
TTTCCTCCTT GACCCCCTCC TTTCCCAATT TATTTGGGTC ACTACCTTGA ATTTAGAGTG	14640
AATCTGGGAA ATGTAGTCAC CAGG	14664

FIG. 8D/10

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